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September 18, 2012

VIA HAND DELIVERY

Arizona Corporation Commission Docket Control 1200 West Washington Phoenix, Arizona 85007 Arizona Corporation Commission

DOCKETED

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Re:

Docket No. RE-00000A-09-0249/Comments of NextEra Energy Resources and LS Power on the Arizona Public Service and Tucson Electric Power Integrated

Resource Plan

Dear Clerk:

Enclosed for filing in the above-captioned docket are the comments of NextEra Energy Resources LLC and LS Power on the Arizona Public Service and Tucson Electric Power Integrated Resource Plan.

Very truly yours,

Christopher D. Thomas

CDT:lba Enclosures

CC:

Scott A. Gorland, NextEra

Kerry Hatevik, NextEra

Jennifer Chamberlin, LS Power

Chairman Gary Pierce

Commissioner Brenda Burns

Commissioner Sandra D. Kennedy Commissioner Paul Newman

Commissioner Bob Stump

Parties on Service List

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Docket No. RE-00000A-09-0249 RECEIVED

Comments of NextEra Energy Resources and LS Power On the Arizona Public Service and Tucson Electric Power 1: 25 **Integrated Resource Plan**

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Introduction

NextEra

NextEra is the largest developer, owner, and operator of renewable energy in North America, with approximately 9,000 Megawatts (MW) of wind energy. NextEra has a diversified power generation portfolio in operation across 24 states and Canada and enjoys an unmatched track record in the development and operation of solar and wind energy facilities. As of December 2011, NextEra has approximately 17,000 MW of electric generation in operation. Additionally, NextEra has over 1,300 MW of new wind projects under construction that are scheduled to be placed into service in 2012. NextEra likewise has considerable experience with solar generation, including its 310 MW Solar Electric Generating Systems (SEGS) facility in the California Mojave Desert, the largest solar facility in the United States. NextEra is currently in construction or has reached advanced stages of development on four additional solar projects. which will add 875 MW of solar generation to NextEra's solar portfolio.

In Arizona, NextEra developed, owns, and operates the 99.2 MW Perrin Ranch wind facility in the Williams area. Perrin Ranch, whose gen-tie was approved by the Commission in 2011, represents a \$200 million investment in Arizona. In addition, NextEra has fully permitted the 250 MW solar photovoltaic Sonoran project in Maricopa County. The Commission approved the Line Siting Committee recommendation for the Sonoran project in late 2011.

LS Power

LS Power is a privately held entity focused exclusively on developing, investing in, and managing large-scale power generation and transmission projects throughout the United States. Since its inception in 1990, LS Power has remained a leader among independent power producers by continuing to provide highly competitive, flexible, and innovative product offerings for our customers.

LS Power has successfully permitted and developed over a dozen greenfield domestic power generation and transmission projects, totaling in excess of 8,000 megawatts of electrical output, and 450 miles of high-voltage transmission facilities, representing a capital investment of over \$7 billion.

In Arizona, LS Power has owned and operated the Arlington Valley and Griffith natural gas fired combined cycle plants. In 2012, LS Power began construction on the Arlington Valley Solar Energy facility (AVSE), a \$500 million, 125 MW solar photovoltaic project in Maricopa County. An additional 125 MW phase of the AVSE is fully permitted by both the ACC and the County. It is ready to begin construction.

Comments on APS's Integrated Resource Plan

NextEra and LS Power commend APS on the thoughtful and comprehensive set of options it presented in its IRP filing to the ACC. APS included four scenarios: 1) the base case; 2) the four corners contingency; 3) the enhanced renewable energy scenario; and 4) coal retirement. APS included in its analysis of each scenario the tradeoffs between the choices and an estimation of the costs for each scenario. All the scenarios require additional capital expenditures as demand increases through 2027, renewable portfolio standard (RPS) requirements ramp up through 2025, coal plants are retired, and natural gas generation is added. The base case assumes 3,712 MW of new natural gas and 685 MW of new renewable resources.

As the Commission weighs the options before it, it is worth noting that the primary tenets of integrated planning include portfolio management, risk mitigation, balance, cost, and diversification. Of the scenarios APS presented, both the enhanced renewable case and the coal retirement case would increase the use of renewable energy as a proportion of the resource mix. The coal retirement case assumes four additional natural gas combined cycle plants and an additional 1000 MW of renewable generation compared to the base case. Natural gas increases as a portfolio mix from 24.7% today to 46% in 2027. The coal retirement case significantly increases reliance on natural gas and fuel price volatility, but mitigates a portion of that risk through additional renewable resources that reduce exposure to fuel cost volatility. This plan reduces environmental compliance cost exposure as well as carbon risk and water usage.

The enhanced renewable energy case is a balanced portfolio with 30% of retail sales being sourced from renewable resources in 2025, and only a modest increase in fossil fuel generation - a single new combined cycle resource in 2020. APS states that the enhanced renewable energy scenario "significantly reduces reliance on natural gas and associated natural gas price volatility."

The enhanced renewable energy scenario provides the best means of risk mitigation. While both the base case and enhanced renewable energy case are diversified and balanced, under the enhanced renewable energy case, 90% of new energy supply would be sourced from emissions-free energy sources, and APS properly assumes it is likely that carbon will be priced into energy costs during the planning period. Thus, the enhanced renewable energy case has the advantage of providing less exposure to environmental compliance and carbon risk. The enhanced renewable energy case also features a lower fuel commodity risk, since renewable resources have zero emissions and zero marginal energy costs.

NextEra and LS Power encourage the Commission to consider the tradeoffs in each scenario and weigh the risk mitigation advantages of the enhanced renewable energy scenario against the relatively small incremental cost of this scenario. As APS notes in the IRP, all the scenarios are within a 3.6% variance on a net present value basis. Only the base case and enhanced renewable case mitigate over-reliance on natural gas and the associated exposure to fuel cost variability and risk. However, the enhanced renewable energy case has lower gas consumption compared to the base case, with the added advantages of lower environmental compliance risk and reduced water use. APS states:

The Base Case Portfolio provides the lowest cumulative capital expenditures and revenue requirements of all portfolios analyzed. The two portfolios that retire some or all of APS's coal fleet do provide reduced CO2 emissions and water usage; however, they come with the tradeoff of a significant increase in natural gas burn and higher cost. In addition, these portfolios do not provide the same level of fuel diversity as either the Base Case or Enhanced Renewable portfolios, and result in APS becoming largely dependent upon natural gas resources to meet future customer needs. The Enhanced Renewable Portfolio provides a comparatively lower natural gas burn than the Base Case Portfolio due to its increased reliance on renewable resources, which also results in modest improvements in CO2 and water use. \(^1\)

As shown below, while the enhanced renewable energy case appears to involve relatively higher costs as depicted in the chart presented by APS, the enhanced renewable energy case actually represents a less than 5% net increase in total costs over the base case. This incremental cost could readily be exceeded by higher than expected carbon costs and more volatility in natural gas pricing under the other scenarios. In addition, the enhanced renewable energy scenario cost could be mitigated at least through 2016 through the higher Investment Tax Credit [ITC].

Comparative Analysis: Differences from Base Case Portfolio in 2027

| | Base Case | Four Corners Contingency | Enhanced Renewable | Coal Retirement |
|----------------------------------|----------------------|-----------------------------|-----------------------|-----------------|
| | Delta from Base Case | | | |
| Cumulative CapEx (\$M) | \$8,726 | \$990 | \$3,914 | \$4 ,543 |
| NPV Rev. Req. (\$M) | \$26,917 | \$388 | \$636 | \$981 |
| Gas Burn (BCF) | Tue . | 48 | (18) | 76 |
| CO ₂ (MM Metric Tons) | | (3) | (3) | (8) |
| Water (000 Acre-Feet) | 50 | (8) | (2) | (23) |

Source: Arizona Public Service Company, 2012 Integrated Resource Plan Workshop, presentation materials, August 22 2012, page 8.

Renewable Costs and Expiring Federal Tax Incentives

The Commission likewise should consider the different policy drivers that will affect renewable energy development and costs in the coming years, including the ITC. The ITC represents a 30% discount to renewable energy costs and a transfer of that value from the federal government to Arizona. Even if the ITC expires as currently envisioned in 2016, it greatly affects the economic tradeoffs. While the IRP process is about planning and not specific

¹ Arizona Public Service Company, 2012 Integrated Resource Plan, March 2012, page 56.

procurement rules, it is appropriate to consider the value of various policy choices when balancing the cost of the alternatives. NextEra and LS Power encourage the Commission to consider the procurement rules and commercial arrangements that should be in place prior to the ITC expiration so that developers and load-serving entities (LSEs) can maximize the ITC benefits for Arizona consumers. Currently, projects must meet a commercial operation date (COD) at the end of 2016 to take advantage of the ITC. The Commission's policies are critical for enabling Arizona utilities to capture the ITC benefit for consumers.

APS's unmet renewable need begins in 2017, and thus does not assume the current ITC value in its economic analysis. Instead, it assumes the ITC continues past 2016 at 10%. In addition, pursuant to ACC decision No. 71448, APS will procure an additional 1.7 million megawatt-hours of renewable energy by December 15, 2015 than otherwise required to meet the state Renewable Energy Standard (RES). However, the result of the additional renewable procurement in the early years is that APS has relatively little incremental renewable procurement from 2015 and 2020 (aside from demand increases) before a significant step up in renewable procurement from 2021 to 2027. Under the enhanced renewable plan, APS would procure 1,170 MW between 2015 and 2027 and 180 MW under the base case scenario.

The Commission should consider options such as front loading renewable procurement to allow consumers to take advantage of the tax credit before it expires. This makes even more economic sense to the extent the Commission selects the enhanced renewable or coal retirement planning approach, either of which would entail larger portions of renewable resources in the portfolio than the base case. It would also reduce the estimated cost of solar procurement by an additional 20% and reduce the totality of the enhanced renewable case.

Regardless of the scenario ultimately selected, NextEra and LS Power suggest the Commission consider allowing at least fifty percent or more of the renewable megawatts of the particular scenario be procured in advance to take advantage of the tax credit before it expires. For example, if the Commission selects the base case, the entire 90 MW of renewable procurement could be procured in time to capture the expiring ITC in 2016. Under the enhanced renewable scenario, an even greater amount of renewable energy, at least 585 MW, would be procured in advance at a price that takes advantage of the ITC.

Utilities should have the flexibility to structure transactions in a manner that minimizes the risks to consumers of over-procurement in the short-term, while providing them with the commercial flexibility to capture the consumer benefit from the ITC over the long-term. Establishing procurement authority in this RPS docket will allow the market to craft commercial structures and the utilities to consider how to cost-effectively meet their RPS needs beyond 2016.

Ruling on the IRP

We understand from the August 22nd workshop that Commission Staff intends to provide a recommendation on the IRPs in December of this year, in order to facilitate a Commission decision in April 2013. The utilities require guidance from the Commission in planning over the next 15 years. Developers need to understand the State's resource policies and the potential demand for supply resources. NextEra and LS Power encourage the Commission to provide

clear direction to utilities and the market with regard to the resource portfolios for which they should plan. Utilities would then plan their procurement in accordance with the Commission's direction, including bringing specific resource procurement options to the Commission in accordance with the adopted plan. Developers would be provided direction that is important for investment. Consumers would be assured a balanced approach that considers risks over the long-term and the costs and benefits of the various resource procurement options. It is important to distinguish between planning and procurement in this docket. The IRP should provide policy guidance to the utilities that they can use when making their procurement decisions that ultimately get submitted for Commission approval. The specific procurement decisions will be left to the annual implementation plans, which should reflect the policy guidance. The value of the IRP is a long-term perspective that balances costs, benefits, and risks to result in a deliberate approach to planning and procurement over the long-term.

We thank you for your consideration.

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